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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/734,891	. 12/15/2003	Kevin S. Sakuda	8913 EXAMINER		
75	90 02/24/2005				
Kevin Shigeo Sakuda 3400 Stevenson Blvd. #M-34 Fremont, CA 94538			RICCI, JOHN A		
			ART UNIT	PAPER NUMBER	
	, , , , ,	•	3714		
			DATE MAII FD: 02/24/2009	ς.	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	_			
***		10/734,891	SAKUDA, KEVIN S.				
Office Action Summary		Examiner	Art Unit				
		John Ricci	3714				
Period fo	The MAILING DATE of this communication	appears on the cover sheet wi	th the correspondence address				
A SH THE - Exter after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR RE MAILING DATE OF THIS COMMUNICATIOnsions of time may be available under the provisions of 37 CFF SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory pere to reply within the set or extended period for reply will, by streply received by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no event, however, may a re- reply within the statutory minimum of thirt- riod will apply and will expire SIX (6) MON atute, cause the application to become AB	eply be timely filed ((30) days will be considered timely. THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).				
Status							
1)[Responsive to communication(s) filed on _						
2a) <u></u> □	This action is FINAL . 2b)⊠ 1	This action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
4) 🖾	Claim(s) 1 is/are pending in the application	•					
•	4a) Of the above claim(s) is/are with	drawn from consideration.					
5)	Claim(s) is/are allowed.						
6)🖂	Claim(s) 1 is/are rejected.						
·	Claim(s) is/are objected to.						
8)	Claim(s) are subject to restriction ar	d/or election requirement.					
Applicat	ion Papers						
9)[The specification is objected to by the Exan	niner.					
10)	The drawing(s) filed on is/are: a)	accepted or b) objected to	by the Examiner.				
	Applicant may not request that any objection to	the drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the con	rection is required if the drawing	s) is objected to. See 37 CFR 1.121(d).				
11)	The oath or declaration is objected to by the	Examiner. Note the attached	Office Action or form PTO-152.				
Priority (under 35 U.S.C. § 119						
a)i	Acknowledgment is made of a claim for fore All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International Bussee the attached detailed Office action for a	ents have been received. Tents have been received in A Description of the contract of the cont	pplication No received in this National Stage				
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s	ummary (PTO-413))/Mail Date				
	mation Disclosure Statement(s) (PTO-1449 or PTO/SB r No(s)/Mail Date	/08) 5) Notice of Ir	formal Patent Application (PTO-152) 				

Application/Control Number:

10/734,891

Art Unit: 3714

Dear Kevin Sakuda:

The patent application for Speargun Open Muzzle Band Elevators has been examined and a report follows:

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Senne 3,262,441.

Senne shows a speargun muzzle 15 having elevators 20, 21 for raising the power bands17, 18, 19 to the height of the spear shaft.

* * * * * *

The additional patents cited show additional examples of spear or dart guns.

* * * * * *

This letter was prepared by Examiner John Ricci, who can be reached at:

Application/Control Number:

10/734,891

Art Unit: 3714

Voice: 571-272-4429

Fax: Use 703-872-9306 for papers to be delivered directly to the mail room, like formal amendments and responses, change of address, power of attorney, petitions.

Use 703-783-0439 for papers to be delivered directly to the Examiner, like informal or proposed responses for discussion, or notes in preparation for an interview.

Response by Fax is encouraged to reduce mail processing time. Please don't send duplicate papers by mail and Fax.

My supervisor is Derris Banks, 571-272-4419.

PTO main switchboard: 800-786-9199.

Visit our Web site at www.uspto.gov.

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JOHN RICCI PRIMARY EXAMINER ART UNIT 3714 An examination of this application reveals that applicant is acting *pro se*, that is, not using an attorney or agent in the prosecution of this application. Since a patent is a legal document, applicant should consider using the services of a registered patent attorney or agent; lack of skill in this field usually acts as a liability in affording the maximum protection for the invention disclosed.

The following pages contain information about the patent process and Patent Office that applicant may find helpful.

* * * * * *

When one believes he (or she) has invented a useful product, or method useful in industry, the inventor may apply for a patent. The patent gives the inventor the exclusive right, for 20 years from the filing date, to make, import, and sell his invention in the United States. The patent rights may be sold or leased to others. There are two types of patents: a utility patent is for inventions which consist of new combinations of parts or structures which function in a way not previously known, to define a new and useful product. A design patent is for a new ornamentation or shape of an existing product, without regard to its mechanical functioning, which may make the existing product more convenient to use, or provide a more pleasing appearance to encourage consumers to buy it. Most patents issued are utility patents.

The application for a utility patent includes a number of formal requirements, mainly (a) a written description and

drawings, termed the *specification*, to describe the invention (design patents require only drawings, with no written description necessary), (b) a signed declaration that the inventor believes that the invention has not been made by anyone else before, and (c) an application fee.

The specification is a report, typically about 5-30 typewritten pages with drawings if appropriate, explaining the problem the inventor is trying to solve, prior inventions that are similar to the new invention, how the new invention is an advancement over prior technology, and showing the invention and its manufacture and assembly in sufficient clarity and detail that would allow an engineer or manufacturer of that class of products to build and use the invention without undue experimentation or further inquiry. If the patent is granted, the specification is published and makes up most of the text of the patent.

At the end of the specification are claims which set forth exactly what features the inventor considers necessary to define a complete operable product, and to distinguish his invention from the prior products. If granted, the inventor has the right to exclude others from making products which include all the features named in the claims; if others infringe on the claims, the inventor has legal remedy. However, others may make products similar to the invention, or even products described in the specification text as "new" or "inventive", as long as their competing product omits one or more requirements of the claims.

When the inventor has prepared an application which includes the necessary formal requirements and sends it to the Patent Office, the Office is required to (a) issue the

patent, or (b) explain why the claimed invention is not patentable in accordance with the patent laws. The application is channeled through various offices as this determination is being made.

Initially, the papers are accepted in the mail room and assigned a *filing date*. The application then goes through various data entry and classification stages, and clerks assure that all necessary papers are present. If some requirement is missing, the applicant will be notified to send the additional information. If the application is complete, it is then delivered to an Examiner.

The Examiner staff (for utility patents) consists of about 4,000 Examiners. Each has at least a 4 year engineering degree, and some have advanced degrees and legal training. The Examiners are divided into three main divisions: those who review mainly electrical and electronic inventions, those who review chemical inventions, and those who review mainly mechanical inventions. Within each division, the Examiners are divided into teams of about 10 Examiners, or Art Units, which review specific kinds of inventions, for example automotive, airplanes, air conditioning, construction, etc.

When the complete application is delivered to the appropriate Art Unit it is assigned to an Examiner familiar with the type of invention disclosed. The Examiner then reads through the specification and claims. To determine whether the application should be issued as a patent, or if the applicant should be sent a rejection notice, the Examiner mainly asks three questions:

(1) Is the invention disclosed in sufficient detail and

clarity to enable one to build an operable and useful product, or is difficult for one to understand how to make the product and use it?

- (2) Has another inventor already made, or *anticipated*, the product (as defined in the claims)?
- (3) If another has not made the invention exactly as defined in the claims, is the invention so similar to the prior technology (or "prior art") that an ordinary engineer or manufacturer would have found it obvious to modify the prior technology to arrive at the claimed invention?

A body of laws and court decisions has been developed over the years to define the amount of disclosure necessary, and to determine when prior technology anticipates or renders inventions obvious.

If the invention is clearly disclosed, the Examiner will then need to do research to see if anyone has disclosed the claimed invention in the past. It is not necessary that the invention has been patented by anyone else, but only that it is disclosed or on display or for sale or in use somewhere. Most of the research for mechanical inventions involves looking through old patents. Examiners may also consider information in sources such as textbooks, newspapers, advertisements, magazines, and even cite common knowledge or experience. As the Examiner does research, he (or she) will look for inventions similar to applicant's, and additionally look for references which may suggest obvious modifications to prior technology which would result in applicant's invention.

We have about 6,000,000 U.S. Patents on file, as well as millions of foreign patents and other literature. To

facilitate research, the information is classified and organized according to technology, much as the books in a library are organized. The information is classified into about 400 broad classes, which define the general technology area, with each class containing typically 50-500 subclasses which define specific technical features or characteristics of the inventions. Each subclass typically contains 50-500 patents and other literature.

After the Examiner has read applicant's application, the Examiner will determine which classes and subclasses would be most likely to contain inventions similar to that which applicant is claiming, and will look through those, and will remove relevant documents as he searches. At the conclusion of the research, he will then review the invention as defined in the claims, and compare it with the information he found. He will then write a letter to the applicant either granting the patent and explaining why the applicant's invention is patentable over the prior technology, or denying the patent and explaining how the information found anticipates or renders obvious the claims. Then the applicant can either (1) agree that the invention is not patentable and abandon the application, (2) argue that the Examiner has made an error and that the cited information does not anticipate or render obvious the invention, or (3) add additional features to the claims to avoid the prior technology. If the applicant is not satisfied with the Examiner's opinion, the applicant may appeal to a special three-examiner Appeals Board, and the Federal courts.

Keep in mind though that the grant of a patent is not a statement by the Government that applicant's invention is a

"good" idea, or will be desired by consumers; the grant of a patent only indicates that applicant has disclosed and claimed something of some minimal utility which is not shown or rendered obvious by prior technology. Marketing this idea and making money is applicant's responsibility. Some inventions end up in widespread use and make millions of dollars, and others don't even recover the cost of obtaining the patent.

* * * * * *

When writing a claim, the inventor needs to ask whether his invention is either anticipated by any one document, or rendered obvious by one or more documents. However, the answer to this question depends on the amount of detail he is willing to put in the claims: A very broad claim, which includes little detail, will give the invention greater protection and it will be harder for a competitor to design a product which avoids infringing the claims; however, it is more likely that such claim will be rejected over the prior references. On the other hand, with a narrow claim, which includes much detail, it is easier to define over the prior references; however, a competitor may be able to design a similar product by just avoiding one little detail. So what the inventor needs to ask is: "Is it possible to write a claim which includes enough detail to overcome the prior references, but not so much that a competitor will be able to make a product very similar to mine by changing one little feature?" If the answer to this is No, the inventor

shouldn't apply for a patent. If the answer is Yes, then the inventor needs to ask the next question: "Is my invention really an advance in the technology that will be valued by consumers, or are people perfectly happy with existing technology and probably won't be willing to try my product?". If the inventor feels that a sufficiently broad claim can be written that defines a desirable product, then it may be worth applying for a patent.

For example, assume that an automobile is known in the prior art, but an automobile with an AM-FM radio is a novel patentable invention.

An example of a claim which is too broad would be: "An automobile with an electrically-operated accessory". This claim would be rejected under 35 USC 102 because it is known that automobiles conventionally include electrical accessories such as lights and horn; this does not distinctly claim the novel radio idea.

An example of a claim which is too narrow would be: "An automobile with an AM-FM radio and a 6-cylinder engine". In this case applicant would indeed receive a valid patent and would be able to exclude others from selling automobiles with an AM-FM radio and 6-cylinder engine. However, it would be easy for a competing manufacturer to design around this claim by selling automobiles with an AM-FM radio and an 8-cylinder engine. Their competing 8-cylinder automobile would still embody applicant's novel idea and would likely cut into applicant's sales.

The "perfect" claim would be: "An automobile with an AM-FM radio." In this case, a competing manufacturer's product would have to exclude the novel AM-FM radio, so would not

likely cut into applicant's business.

However, the grant of this "perfect" claim still does not guarantee that applicant's product will sell well. If consumers are perfectly happy with the prior technology and perceive no benefit from applicant's improvement, they may not be willing to pay more for applicant's product. A patent, to be successful, must often be combined with a marketing and advertising campaign to make people aware of applicant's new product and demonstrate why the new product is better than old products and why consumers should choose the new product. Although applicant may see his idea as a significant improvement, there is no guarantee that consumers will see it this way.

Also keep in mind that if applicant's invention is for an improvement on an existing product, and there is a currently valid patent on that product, it may not be possible for applicant to manufacture his new product without infringing the existing patent.

For example, if Ford owns a valid patent for "An automobile with an engine and four tires", and ap8licant has invented a novel "Automobile with an engine, four tires, and AM-FM radio", Applicant may very well obtain a valid patent on such automobile with radio. However, if applicant tries to sell such an automobile with radio, Ford may demand payment of royalties, or even shut down applicant's business altogether, because this will infringe their basic automobile patent; applicant's patent will not have full value until Ford's patent expires, which could be years from now.

* * * * * *

Claims are written as a single sentence which is the object of a sentence starting with "I (or We) claim". To see how this works look at the following three claims:

I claim:

- 1. A vehicle having a front and a rear with a seat facing the front and four wheels including a front pair of wheels, and a back pair of wheels.
- 2. A vehicle having a front and a rear with a seat facing the front and four wheels including a front pair of wheels, and a back pair of wheels, and further including an engine supported primarily above said rear wheels.
- 3. A vehicle having a front and a rear with a seat facing the front and four wheels including a front pair of wheels and a back pair of wheels, said vehicle further including an engine supported primarily by said rear wheels, and a power train extending from said engine to said front wheels whereby said rearwardly supported engine can provide motive power to said front wheels.

These are independent claims and are of progressively narrower scope. An independent claim sets forth a complete invention without referring to any other claim. Every patent application must include at least one independent claim.

It is often desired to further define an invention set forth in a previous claim. This may be done with *dependent* claims. A dependent claim refers back to another claim, either independent or dependent, and includes all features of this previous claim, and adds additional features. For example, Claims 2 and 3 could have been written in dependent form as follows:

- 2. A vehicle as in claim 1 and further including an engine supported primarily above said rear wheels.
- 3. A vehicle as in claim 2 and further including a power train extending from said engine to said front wheels whereby said rearwardly supported engine can provide motive power to said front wheels.

Claim 2 covers all the features of the vehicle of Claim 1, plus the rear engine. Claim 3 covers all the features of the vehicle of claim 1, plus the rear engine of claim 2, plus the power train.

Claim 1 if granted would permit the patent holder to exclude others in the United States from making cars, trucks, and even wagons having a seat and four wheels.

Both claims 1 and 2 are not patentable under 35 USC 102 because the VW Bug, which has both four wheels and an engine in the rear, was known and used in this country more than one year prior to today's date in this hypothetical example.

If we assume that the VW Bug and a 1974 Cadillac having a front supported engine and rear wheel drive comprise all of the prior art, then insofar as a rejection of claim 3 is concerned, 35 USC 102 does not apply, but 35 USC 103 may apply.

To determine the patentability of claim 3 one must answer the question: Given a front engine car with rear

wheel drive and a rear engine car with rear wheel drive, would it have been obvious to provide a rear engine car with front wheel drive?

The answer to this question is not always clear. One must consider the skill of a person having ordinary competence in the car building industry. What factors would cause one of ordinary skill to make this combination, and what new and unobvious benefits are to be derived from this unique combination of features?

Claim 3 if granted would give the inventor the right to exclude others from making or using rear engine cars with front wheel drive, and rear engine cars with four wheel drive.

The applicant, as a general rule, does not wish to burden his claims with frivolous or unnecessary limitations. Claim 3 is valuable only if someone wants to make a rear engine car with front wheel drive and is willing to pay the patent holder money for the privilege of making such a car.

One would not, for example, wish to put in his claim the limitation that the wheels are made of chrome plated steel, because car manufacturers would be able to make the inventor's car with painted steel wheels without infringing the claim, and the chances are they would do just that to avoid paying the patent holder royalties.

People not familiar with claim writing should look at the claims of patents which were cited by the examiner and try to get some feel for writing single sentence claims.

In writing a claim always think in generic terminology.

For example, use terms like "fastening means" not "nail or screw" whenever possible. If an inventor's claim calls for a screw holding two parts together, a competing manufacturer can make the claimed device using a nail to hold the parts together without infringing the claim and without paying the inventor or patent owner royalties. Also, since the claim must define something different and unobvious over the prior art, claiming something like a specific fastening means will usually not help overcome an obviousness rejection because it is obvious to substitute a screw for a nail.

* * * * * *

HOW TO RESPOND TO THIS ACTION

What to Include in the Response

In response to this Action, Applicant may make amendments or corrections to the text of the specification, claims, or drawings to overcome any rejections or deficiencies explained herein. However, in correcting the application the Applicant should take care not to enter "new matter" into the application. This means that features, method steps, or other parts of the invention not disclosed by the Applicant in the specification and claims as originally presented can not be added at this time, but the Applicant may rewrite portions of the presented material to bring his application into compliance with the Code of Federal Regulations.

Although Applicant may telephone the Examiner for questions or advice, the official reply to this action must be in writing. If Applicant feels that there are errors in the objections and rejections in this action, he must distinctly and specifically point out the supposed errors and must respond to every ground of objection and rejection. The Applicant must point out the patentable novelty which he thinks the claims present in view of the references cited or objections made. If amendments are made, he must show how the amendments avoid such references or objections.

Each section of an amendment document (Specification Amendments, Claim Amendments, Drawing Amendments, Remarks) must begin on a separate sheet. A new or corrected Abstract must also be on a separate sheet.

Amendments to the Specification

Amendments to the *specification* text are made by specifying which paragraphs are being amended (for example by page and line numbers), and reproducing the entire text of these paragraph(s) with markings to show what changes have been made, by striking through words to be deleted (like this) and underlining words added. You must rewrite these entire paragraphs even if only one word therein has been changed. However, if a great many changes to many paragraphs are required, Applicant should rewrite the entire specification in clean (unmarked) format.

When sending a new clean specification, it is also necessary to:

- A. Include a copy of the *old* specification with markings to indicate the deletions, insertions, and corrections that have been made (using strikeout to indicate words that have been deleted and underlining to indicate words that have been added);
- B. Include a statement that the new specification includes no new matter that was not disclosed in the original specification. This statement must be accompanied by the following language:

"I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of

Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon."

Amendments to the Claims

If any amendments to the claims are made, you must provide a listing that accounts for all claims that have ever been presented in the application; you must provide this list even if only one word of one claim is being changed. In this list, you must also provide the text of each currently pending (non-canceled) claim. After the claim number of each listed claim, add in parentheses, the appropriate designation: "original", "currently amended", "canceled", "withdrawn", "previously presented", "not entered", or "new".

Only Claims which are currently amended must include markings to show what changes are being made, by striking out words deleted and <u>underlining</u> words added; if any claim is canceled, you don't have to re-write the text, just put "(canceled)" after its number.

If changes to a claim(s) are extensive, it should be canceled and rewritten as a completely new claim(s) without underlining. The numbering of the new claims should begin with the number next following the highest numbered claim existing in the application. When claims are canceled, remaining claims should not be renumbered. Also remember

that the application filing fee covers up to 20 claims, up to 3 of which may be *independent*. If at any point in the prosecution the number of active (non-canceled) claims exceeds 20 total / 3 independent, it is necessary to send an additional fee for the additional claims (see enclosed fee list or www.uspto.gov). If claims are later canceled to reduce the number of claims, Applicant will not be entitled to a refund.

Exceptions to the Underlining/Strikeout Procedure

- (1) For deletion of 5 characters or less, double brackets may be used, for example [[word]].
- (2) if strikeout cannot be easily perceived, for example deletion of the number "4", double brackets must be used, for example [[4]].

Amendments to the Drawings

Amendments to the *drawings* are made by presenting replacement sheet(s) which incorporate the desired changes; an explanation of the changes made must be presented in accompanying remarks. In addition, a marked-up copy of the drawings showing changes made, for example in red ink, is useful but not required. Any replacement sheet must be labeled in the top margin as "Replacement Sheet", and include all figures that previously appeared on that sheet, even if only one is being amended. (Any marked-up sheet must be labeled "Annotated Marked-Up Drawings").

A paper presenting amendments and/or remarks must bear an original signature by *all* Applicants, or registered Patent Attorney or Agent.

When & Where to Respond

The address for response is:

Patent & Trademark Office P.O. Box 1450 Alexandria, VA 22313

A response to this action must be received within three months from the action mailing date, as noted on the cover page. However, this period may be extended to up to six months by filing a request with the appropriate fee under 37 CFR Section 1.136(a). The extension fees are in an enclosed fee schedule, or are available at www.uspto.gov. If no response has been received after 6 months, the application will be considered abandoned and will be removed from our files.

We don't consider the postmark date; the date that the Applicant's response is actually received in the Patent Office mail room will be deemed the date of response, unless Applicant sends the response by U.S. Mail and includes a "Certificate of Mailing" statement in the papers. A Certificate of Mailing allows Applicant to mail the response right up to midnight of the last day for response, and it will still be accepted, even though it will arrive after the period for response. Even if Applicant is mailing the response well before the due date, it is still recommended

to use a Certificate of Mailing in case the response is unexpectedly delayed by the Post Office. The Certificate of Mailing consists of the following statement:

"I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on ..."

Name of	applicant,	assignee,	or Registe	red	
Represe	entative				
Signatu	ıre				
Date	10.25				

Fax Response

The Office is able to accept some types of papers by Fax, including amendments and remarks in response to an Office letter. The Fax number is given in the Office letter. Be sure to keep the original copies with original signatures on file for as long as the patent is valid. If a fee is due, you may pay the fee by a major credit card (American Express, Discover, Master Card, Visa) using form PTO-2038. Formal drawings cannot be accepted by Fax.

Once Applicant's response has been received, it will ty6ically take 3 or 4 months before the Examiner again reviews the application and notifies Applicant of the results. However, as assurance that the response has been received, Applicant may include a self addressed stamped post card in the envelope, with the serial number of the application and a list of the things submitted written on

the back (such as "Amendments to claims" and "Two new sheets of drawings"). The card will be stamped with the date received and returned immediately upon receipt. It is also acceptable to send the response certified, registered, or Express mail.

In order to match the response with the file, it should clearly indicate on the front page the inventor's name, application serial number, Art Unit number, date application was filed, title of invention, and a brief statement of the purpose of the paper or what it is in response to.

Telephone Assistance

The phone number of the specific Examiner handling this application is given in this letter. You may phone the Examiner for information regarding the status of the application, as well as to ask questions or make comments concerning the technical merits of the application.

The Patent Office also maintains an automated help line, 800-786-9199. You may use this line to hear recorded information on topics relating to patents and trademarks, and order publications and forms.

Internet Access

Visit the USPTO web site at http://www.uspto.gov

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John A. Ricci Primary Examiner